

IN THE CLAIMS

1-9. (canceled)

10. (currently amended) A drug composition for continuous or progressive or continuous and progressive administration to a subject orally, subcutaneously, transdermally or any combination thereof, comprising as a first component, nicotine or a nicotine derivative, wherein said nicotine or nicotine derivative is present in an amount sufficient to be administered to said subject at a rate of from 0.2 mg to 5 mg per day per kilogram of body weight of said subject and a second component comprising L-DOPA in a dose at least 30% lower than the effective dose when L-DOPA is administered in the absence of said first component.

11. (canceled)

12. (previously presented) The drug composition of claim 10 wherein said second component further comprises a dopaminergic agonist.

13. (previously presented) The drug composition of claim 12 wherein said dopaminergic agonist is selected from the group consisting of bromocriptine and piribedil.

14. (previously presented) The drug composition of claim 10 wherein at least one of said components is in galenical form.

15. (previously presented) A method for improving the functionality of D1 and D2 dopaminergic receptors associated with neurodegenerative diseases, multi-systemic atrophies or both, comprising administering to a human mammal over a long term period an effective dose of at least two drug components comprising a first component nicotine or a nicotine derivative, and a second component comprising L-DOPA and a dopaminergic agonist.

16. (canceled)

17. (canceled)

18. (previously presented) The method of claim 15, wherein said D1 and D2 dopaminergic receptors are associated with neurodegenerative diseases.

19. (previously presented) The method of claim 18 wherein said neurodegenerative diseases are selected from the group consisting of Parkinson's disease and Tourette's syndrome.

20. (canceled)

21. (previously presented) The method of claim 15, wherein said dopaminergic agonist is bromocriptine or piribedil.

22. (previously presented) The method of claim 15, wherein said drug composition is administered transdermally, subcutaneously, by using an extracorporeal pump, or orally.

23. (previously presented) The method of claim 22 wherein at least one of said components is in galenical form.

24. (previously presented) The method of claim 15, wherein said first component is administered at a gradually increasing rate.

25. (previously presented) The method of claim 24 wherein said gradually increasing rate is of from about 0.2 mg to about 5 mg per day per kilogram of body weight.

26. (previously presented) The method of claim 25 wherein, the effective dose of said L-DOPA is at least 30% lower than the effective dose when L-DOPA is administered in the absence of said first component.

27. (currently amended) The method of claim ~~26~~ 15 wherein the term of said long period is at least about four months.

28. (currently amended) A method for treating a neurodegenerative disease, a multi-systemic atrophy, or both, in a human mammal comprising administering over a long term period an effective dose of at least two drug components comprising as

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a first component, nicotine or a nicotine derivative, wherein
said nicotine or nicotine derivative is present in an amount
sufficient to be administered to said human mammal at a rate of
from 0.2 mg to 5 mg per day per kilogram of body weight of said
human mammal and a second component comprising L-DOPA and a
dopaminergic agonist.

29. (canceled)

30. (canceled)

31. (previously presented) The method of claim 28
wherein said dopaminergic agonist is bromocriptine or piribedil.

32. (previously presented) The method of claim 31
wherein said treatment enables multiplication, stimulation and
increase of nicotinic receptors and pre-synaptic and post-
synaptic D1 and D2 receptors in the nigrostriatum zone.

33. (previously presented) The method of claim 28
wherein said drug composition is administered transdermally,
subcutaneously, by using an extracorporeal pump or orally.

34. (previously presented) The method of claim 28
wherein at least one of said drug components is in galenical
form.

35. (previously presented) The method of claim 28
wherein said first component is administered at a gradually
increasing rate.

36. (canceled)

37. (canceled)

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38. (currently amended) The method of claim ~~37~~ 28
wherein the term of said long period is at least about four
months.

39. (previously presented) The drug composition of
claim 10 or claim 53 wherein said nicotine or said nicotine
derivative is present in an amount sufficient to be administered
to said subject at a rate of from 93 mg to 160 mg per day.

40. (canceled)

41. (previously presented) The drug composition of claim 10 or claim 53 wherein said L-DOPA is present in an amount sufficient to be administered to a subject at a rate of 0.2 mg to 3 mg per day per kilogram of body weight of said subject.

42. (canceled)

43. (canceled)

44. (currently amended) The method of claim 15 wherein said administering is continuous [[,]] or progressive in doses which increase over three consecutive months followed by stabilized doses after three months.

45. (previously presented) The method of claim 44 wherein said nicotine or nicotine derivative is administered at a rate of from 93 mg to 160 mg per day.

46. (previously presented) The method of claim 44 wherein said nicotine or nicotine derivative is administered at a rate of 0.2 mg to 5 mg per day per kg of body weight of said subject, and wherein said L-DOPA is administered at a rate of 0.2 mg to 3 mg per day per kg of body weight of said subject.

47. (canceled)

48. (canceled)

49. (previously presented) The method of claim 35 wherein said administration of said first component at a gradually increasing rate is accompanied by a concomitant reduction in the L-DOPA dose.

50. (currently amended) The method of claim 28, wherein said administering is continuous or progressive in doses which increase over three consecutive months followed by stabilized doses after three months.

51. (previously presented) The method of claim 50, wherein said nicotine or nicotine derivative is administered at a rate of from 93 mg to 160 mg per day.

52. (previously presented) The method of claim 50, wherein said nicotine or nicotine derivative is administered at a rate of 0.2mg to 5mg per day per kg of body weight of said subject, and wherein said L-DOPA is administered at a rate of 0.2 mg to 3 mg per day per kg of body weight of said subject.

53. (currently amended) A drug composition for continuous or progressive or continuous and progressive administration to a subject orally, subcutaneously, transdermally or any combination thereof comprising as a first component, nicotine or a nicotine derivative, wherein said nicotine or nicotine derivative is present in an amount sufficient to be administered to said subject at a rate of from 0.2 mg to 5 mg per day per kilogram of body weight of said subject and a second component comprising L-DOPA in a dose of 0.2 mg to 3 mg per day per kilogram weight of said subject and a dopaminergic agonist.

54. (previously presented) The drug composition of claim 53, wherein said dopaminergic agonist is selected from the group consisting of bromocriptine and piribedil.

55. (canceled)

56. (canceled)

57. (canceled)